## REQUEST FOR PROPOSAL

**GENERAL:** The Red River Authority of Texas (RRA) is needing to replace approximately 1,350 LF of 600 Volt underground and submersible power cable and 1,350 LF of 600 Volt control cable from an existing electrical control panel to operate a new submersible 100 HP pump in Lake Texoma, Grayson County, Texas.

# **POWER & CONTROL CABLE SPECIFICATIONS:**

## 1. 600 VOLTS 250 MCM 3 CONDUCTOR W/GRND. MARINE RATED POWER CABLE:

Power cable shall be rated for submersible and direct bury type pump service and shall be UL listed as Type XHHW-2 and rated for 600 Volts. The cable shall comply with ICEA S-75-381/NEMA WC58, ICEA S-95-658/NEMA WC70, ASTM B-172, ASTM B 33, and UL 44. The jacket shall be abrasive resistant and constructed of heavy-duty Chlorinated Polyethylene (CPE) thermoset compound or may be of PVC. Cable shall consist of 3 Copper Conductors w/Grnd. The power cable shall be spliced with a watertight submersible connector at the end of the 50' pump cable and shall also be spliced at the junction box on top of the constructed power pole. Watertight splicing connectors shall be TMCX connectors that are compatible with the power cable.

# 2. 600 VOLTS No. 14 AWG – 2 CONDUCTOR MARINE RATED CONTROL CABLE:

Control cable shall be rated for submersible and direct bury type service and shall be UL listed and rated for 600 Volts. The cable shall comply with ICEA S-75-381/NEMA WC58, ICEA S-58-679/NEMA WC70, ASTM B-174, ASTM B 33, and UL 62. The jacket shall be abrasive resistant and constructed of heavy-duty Chlorinated Polyethylene (CPE) thermoset compound or may be of PVC. Cable shall consist of 2 Copper Conductors. The control cable shall be spliced with a watertight submersible connector at the end of the 50' pump control cable and shall be spliced at the junction box on top of the constructed power pole. Watertight splicing connectors shall be TMCX connectors that are compatible with the control cable.

# **ADDITIONAL SCOPE, CONDITIONS & REQUIREMENTS:**

- Contractor shall furnish & install power & control cables with a minimum cover of 24" over the top of the cables. (Note: Trench Excavation not required below existing lake level.)
- > Contractor shall provide for a two (2) year warranty from the date the cables are installed and operational.
- ➤ RRA will provide for a water-tight submersed connection of the pump power, sensing and control cable to the new 250 MCM submersed cable and RRA will also provide for the termination connections at the existing electrical control panel.
- Contractor shall remove the submersed portion of the existing abandoned cables and coil the cables on shore to be salvaged by RRA.

# 3. SULZER SUMBERSIBLE PUMP & MOTOR:

➤ <u>MODEL XFP 100J – CH2 60 HZ.</u> (NO OR EQUALS ACCEPTED)

#### ADDITIONAL SCOPE, CONDITIONS & REQUIREMENTS:

- > Selected pump, base plate, and base elbow shall be delivered to the Preston Shores Water Treatment Plant located at the following address: Preston Shores Water Plant, 208 Sherman Drive, Pottsboro, Texas 75076.
- ➤ Pump Supplier shall provide for a two (2) year warranty from the date the pump is installed and operational.
- Pump Supplier shall provide for three (3) days of on-site technical support during the installation and start-up period.
- RRA will install the pump and provide for a water-tight submersed connection of the pump power, sensing and control cable to the existing 250 MCM submersed cable.

All proposals must be submitted to Fabian Heaney, Assistant General Manager, Red River Authority of Texas, P.O. Box 240, Wichita Falls, Texas 76307-0240, no later than 4:00 PM, Wednesday, March 8, 2023.

All technical questions regarding the specified cables shall be directed to Kerry D. Maroney, P.E., 940-766-0156 (Office) or 940-781-3581 (Cell).